

ABSTRACT

An instant messaging (IM) system and a method for communicating instant messages between an IM server 11 and a remote communication network utilising a sequential message handshaking protocol across a computer network that is prone to latency and instability. The remote communication network is a GSM network 16 having "Short Message Service" (SMS) for subscribers with mobile GSM devices 18 linked to a "Short Message Server Centre" (SMSC) for sending and receiving instant messages remotely of the GSM network 16 and as part of the IM system. The SMSC is provided with an SMSC server 15 connected by a highly stable link 19 with low latency to an SMSC buffer server 14 forming part of the computer network. The SMSC buffer server 14 is connected to the IM server 11 via the internet 13 to complete the computer network. The SMSC buffer server 14 provides for sequential message handshaking that requires and provides a confirmation of receipt of message from the SMSC server 15, and is provided with a buffer to facilitate storage of received instant messages received from the SMSC server 15. Delays are mitigated in the communication of instant messages between the SMSC server 15 and the SMSC buffer server 14, regardless of latency and instability associated with the internet. The SMSC buffer server 14 is also provided with a protocol that doesn't rely upon sequential confirmation of message transfer for communicating messages rapidly via the internet with the IM server, thereby accommodating latency and stability problems associated with the internet.